

## Questions and Answers

PON-08-006

### Emerging Technology Demonstration Grant (ETDG) Program

**1. Corrections to the Pre-Bid Powerpoint Presentation:**

The Pre-Bid presentation contained an error on slide 22, which incorrectly listed: Interview Applicants (if Necessary) to occur on March 26, 2009.

The correct statement is:

Interview Applicants (if Necessary) between May 11-15, 2009

**2. Does the applicant have to be within a PUC territory utility to be eligible?**

No, they do not have to be within a PUC territory, but the demonstration must be within CA and must have benefits to California Rate payers.

**3. Do we need to find support of a California Utility at stage I or II? Can the support be solicited after the award?**

The sooner you have support of a utility to provide you with the information you need for your abstract and/or proposals the better. However, California utility support at stage 1 is not required. But the Measurements and Verification protocol for assessing performance, as described in your proposal should be acceptable to the utility where the demonstration is located. Even if you are unable to contact the local utilities, the parameters to be measured, and necessary equipment, should be configured into your proposal.

**4. May we combine grant funds with SGIP incentives? Energy storage is currently eligible for SGIP incentives if associated with fuel cells or wind turbines.**

Yes, you can combine grant funds with SGIP, and SGIP funds can be counted as match funds.

**5. What does this mean: "The abstract tells how to and where to access the validated, detailed data on its prototype or pilot-scale performance"? Does data need to be posted online or published?**

Not necessarily. The abstract should identify the data that validates the performance, it should tell how the data was developed, analyzed and by whom, and how it can be reviewed by the Commission scoring committee. The data could be posted online as peer reviewed journals or internal company documents, however they should be made available to the Commission scoring committee if asked for them.

**6. If a project exceeds \$400K can we use support from the DOE or other entities to reach the funding level needed?**

Yes, Applicants can use other funding source to support a project if it exceeds \$400K. However, the maximum PIER funding will be \$400K and will require 25% in match funding of the requested PIER funding amount.

**7. How do we register for Q&A answers and other PON updates?**

Interested parties can subscribe to the Energy Commission's list server to receive updates on this solicitation including the Question and Answers posting. To subscribe use the following link below and enter your Name and Email address on the List Server box on the right-hand side of the webpage.

<http://www.energy.ca.gov/contracts/index.html>

**8. May we submit more than one similar project? Or could back-up sites also be eligible for funding on their own?**

Applicants should submit one application for one particular demonstration and may have a backup site for that one particular demonstration; Applicants may not have two demonstrations of the same technology. If two or more sites exist for the demonstration, the most promising one should be listed as the primary demonstration site with the second site serving as a backup.

**9. Are there requirements for public access to view demonstrations or is a report sufficient?**

One of the main purposes for these demonstrations is to ensure that other interested parties can see the technology at work. However, we are aware that many of the demonstrations sites, especially in industrial and data center applications, have their own operating schedules and restrictions, and may not have easy access. Keeping this in mind, we still require that demonstration sites be available for public access with due notice and proper procedures and could even have set times for public access.

Additionally, project reports are required from awards from this solicitation.

**10. When are grant funds released?**

Awards are anticipated to be approved at a Commission Business meeting on or about July 2009, after which the grant agreement(s) will be signed and fully executed. Once the agreement is fully executed, grant funds will be reimbursed in arrears for allowable and approved expenditures incurred in the performance of the agreement.

**11. Is there a required timeline for obtaining the matching funds relative to the timeline of the grant solicitation?**

In accordance with Task 1.6 of the Scope of Work template, match funds are required to be identified in writing and commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement. Please realize, however, that even before the Commission makes grant awards, the scoring committee will score match funds in part based on the degree to which they are “secure” (see Attachment H, Stage 2 Evaluation Criteria #8(c)).

**12. Is there a restriction on the types of facilities that can participate in a demonstration under this solicitation - for example, federal facilities or other governmental facilities?**

If these facilities are in California, are easily accessible and can demonstrate the technologies’ potential, then there are no restrictions. With advanced notice and proper compliance with the host sites’ safety and security procedures, the owners of the sites selected for demonstrations must allow interested parties to be able to see the technology at work. The public interest is served and commercialization is expedited if the potential users of the technology can see the actual performance of the PIER funded demonstrations.

**13. Is a power generation, heat recovery, water treatment project within the agricultural industry eligible to apply under this grant solicitation?**

Yes, if the technology is for post-harvest food processing, irrigation and water recovery.

**14. Can you please clarify your recent statement that SGIP funds cannot be counted as match. It was my impression that only PIER funding cannot be counted as match.**

Please see response to question number 4 above.

**15. Is there a standard or target overhead percentage required in the financial projections?**

While there is no standard or targeted overhead rate, all costs incurred under the award must reflect actual costs incurred. Applicants should propose overhead/indirect rates that reflect actual indirect costs incurred and adhere to Generally Accepted Accounting Principles. If any rates proposed in the budget appear excessive, the Energy Commission reserves the right to request additional documentation supporting the rate.

- 16. If a project requires a preliminary study to determine efficacy, may we submit a number of sites in our proposal that would then be evaluated, with one site then used as a demonstration after the study is completed?**

Yes that is possible, but Applicants must submit at least one site that meets the criteria under stage 1 scoring (see Attachment G) of this solicitation.

- 17. Regarding manufacturing and installation time requirements, what is the acceptable period for demonstration?**

That would depend on the project and particular industry. For example, if one chose to demonstrate a technology for food processing, then the technology should take into account the seasonal nature of the industry. While there is no lower limit, sufficient demonstration time should be allotted to prove the robustness of the technology under various operational conditions. The upper limit on the demonstration period is 2 years under this grant solicitation.

- 18. Does a project at a dairy to process flush water in addition to other by production of milk processing, etc. using new technology for energy generation and efficiency and heat recovery qualify under this solicitation?**

It will be eligible as long as the demonstration is with a California dairy and provides benefits to California ratepayers.

- 19. Are non-profits located in California eligible for CBE preference points?**

Yes, assuming the Applicant meets the requirements in Attachment I and completes and submits the questionnaire in Attachment J of this solicitation.

- 20. If a proposed project can qualify in more than one category, how is the category decided?**

As part of the application process, Attachment A requires the applicant to select which Targeted Technology Area the proposal falls under. However, the Energy Commission reserves the right to make the final determination on which category submitted proposals fall under.

- 21. Is there another solicitation like this one or will there be others to follow? Is this the only one?**

The intentions are there but there are no guarantees. Future solicitations will be subject to the Energy Commission's policy goals and available funding.

- 22. With regards to new water turbine design for agricultural canals, we have done a Computational Fluid Dynamics (CFD) analysis with the University of**

**Iowa to verify the efficiency of the design. Is that sufficient, or do you require a physical demonstration?**

Theoretical analysis, regardless of its sophistication, will not meet the requirement for this solicitation. An actual, physical working prototype, regardless of its size, that has validated the CFD analysis, is required.

**23. What has been the past track record for this program: # of applicants versus number of funded programs, average size of grant, etc.?**

This information is not available because this is the first time we have issued a solicitation seeking demonstrations that requires a prior, validated proof of performance.

The solicitation has included an estimate of how many projects will be funded and an approximate grant size. Please see Section 8 of the Grant Application Manual for more information.

**24. When will Question and Answers be available?**

All questions and answers are expected be posted on February 13<sup>th</sup>, 2009.

**25. I'm interested in getting VMware involved in this. However, it's not 100% clear to me that "Data Centers" would be considered "Industrial" and whether "Software" based solutions are acceptable.**

For the purpose of this solicitation, the term "industrial" is defined to also include wastewater treatment facilities, commercial facilities that house data centers and post-harvest processing of agricultural products.

For software based solutions, that would depend on the particular project. If the software has advanced to the beta stage (with proven performance data) and would lead to direct on-site energy savings then it would be eligible.

**26. I would like clarification on the matching funds for the grant opportunity. If a sponsoring entity provides real estate or land, for the project, with a value significantly higher than the grant value, does this qualify as match funding? It stands to reason that cash match funding would have to be used to secure a location anyway. With that in mind, does the land qualify as the match funds?**

Land can count as match funding but, just like all sources of match funds, only for the value contributed to the proposed project. This can be difficult to assess. Unlike hardware which depreciates over time until it has no residual value, land can keep and even increase in value. Applicants wanting to use land as match

funding must provide an appropriate approach of valuing the contribution of the land to the project (e.g., the foregone rental value of the land for the project duration - if it has rental value).

- 27. We plan to demonstrate a 100kW x 2hr pilot storage system this year with Scottish Power supported by the UK Government's DBERR division - this is a capital deferral/line reinforcement application. In the USA, we will be aiming at the windfarm market for intermittency management and have also noted the recent interest and RFP from PG&E for peak shaving applications. Would this technology be eligible for funding under this grant solicitation?**

If the storage technology is past the “proof-of-concept” stage and has validated and verifiable proof of performance, the technology is eligible. In addition, the energy storage application should be on the customer side of the meter. It cannot be a transmission or distribution level energy storage project unless the end-use customer is taking its power from the utility at a sub-station level. In some instances, some very large customers do that. Other criteria for the eligibility are that the site be in California, and that it has clear and direct benefits to end-use customer.

- 28. Our company, Cascade Clean Energy, Inc., is registered, headquartered, and operating in California. The demonstration site will be also in California. But our company was incorporated in Delaware. Do we count as a CBE?**

Yes, assuming the Applicant meets the requirements in Attachment I and completes and submits the questionnaire in Attachment J of this solicitation.

- 29. We have an emerging clean energy technology and will work with the wastewater treatment facility of the Dublin San Ramon Service District (DSRSD) for building the demonstration, should we apply for the industrial or water wastewater category?**

As part of the application process, Attachment A requires an applicant to select which Targeted Technology Area the proposal falls under. If a large number of potential users of your technology are municipal waste water plants then that might be the right category. If the most likely users are industrial plants, then that might be the best category. However, the Commission reserves the right to make the final determination on which category submitted proposals falls under.

The purpose is to demonstrate a technology at a site that will most resemble your large market. A demonstration at a similar site to the intended market will help bolster the potential users' confidence as well as that of utilities serving the intended customers. If the demonstration is at a site that is not representative of its intended market, then the value and benefits of the demonstration could be diminished.

**30. Can the measurement and verification come from sources other than California utilities?**

Yes, it is possible. However, it must be equivalent to that performed by, and acceptable to the energy utilities and adequate for qualifying the technology for energy utility incentive programs. The purpose of this grant program is to demonstrate emerging technologies while concurrently providing adequate monitoring and verification (M&V) that will provide a basis for the utilities to allow them to be included in utility incentive programs. M&V that does not meet this requirement is not consistent with this solicitation. The fastest and most certain way to ensure a local utility's acceptance of a technology, and hopefully eligibility for the utility's efficiency program incentive, is to propose an M&V protocol that is acceptable to the utility. If the utility or its designated agent does not want or is unable to perform M&V for the proposed demonstration, then M&V from other sources is required. However, the proposed M&V must be conducted and reported in a manner acceptable to the utility in whose jurisdiction the demonstration is located. Generally, the M&V protocols of California utilities are fairly standard. They measure electricity savings, power demand, power quality, gas savings, air emissions, equipment and system efficiency, etc. To ensure accuracy and timeliness of the measurements, the proposed demonstrations should allow installation of the necessary instrumentation and equipment. Parameters to be measured and instrumentation to do so could be site specific and vary with the technology being demonstrated. The basic idea behind this solicitation is not only to show that the technology performs in its intended application, but to show how well it performs, and whether it can do so in a cost-effective, efficient, and safe manner.

**31. I would like to propose to use the PIER funding for site preparation and customer funding for construction of the actual facility (as it will require more funding than is available through this solicitation). Does this fit within the scope of solicitation?**

Yes, PIER funds can be used for site preparation. However, the release of PIER funds would be tied to the completion of the actual facility to a certain level where the construction cost is equal to the PIER funds requested. This is to

guard against the possibility that PIER funds are spent for site preparation early in the project and the actual facility construction and/or technology demonstration project is cancelled or delayed indefinitely for some unforeseen reason. PIER project agreements are generally structured such that PIER funds are expended concurrently with, or after match funds are expended; exceptions to this pattern are considered on a case-by-case basis.

**32. Definition of Eligible Projects: Is it possible to further clarify the meaning of "industrial?" What is not covered? Our technology fits squarely into water/energy efficiency - it is probably more apt for institutional end use water savings vs. "industrial" - is this OK?**

The solicitation is seeking energy efficiency in "industrial" setting and includes water and wastewater treatment plants as "industrial" scale treatment facilities. Such facilities could be for treating water for agricultural use or discharge, a municipal water treatment facility, or an industrial plant water treatment facility. If the technology demonstration project is aimed at reducing water consumption in an institution such as a dormitory, commercial building, hotel or hospital, without a corresponding energy savings on-site then it is not eligible for this solicitation as an industrial facility. At present, there are California Public Utility Commission (CPUC) approved pilot projects for California utilities that are aimed at water savings and will analyze the link between water savings and energy savings. There is also a PIER Buildings Efficiency Program (<http://www.energy.ca.gov/research/buildings/index.html>) that would more appropriately handle commercial and institutional building-related energy efficiency projects. The intent of this solicitation is not to replicate those efforts. Thus, our definition of "industrial" is limited to the segments described in the solicitation. However, water conservation demonstrations with associated energy savings and meeting the requirements for "industrial" sectors are eligible provided they result in direct site-level energy savings for the industrial end-use customer (customer side of the meter). Water savings technology demonstrations that do not result in direct site-level industrial end-use customer energy savings are not eligible.

**33. Do military facilities qualify as demonstration sites?**

One of the main purposes for these demonstrations is to ensure that other interested parties can see the technology at work. Keeping this in mind, we require that demonstration sites be accessible and available for public viewing with due notice and regard for proper procedures, and should have set times for public access. Military facilities generally have restrictions on visits by the public and do not have easy access. In such a case, a military facility may not be the



best site. However, if this access and availability is not a problem, then a military facility is eligible as a demonstration site.

34. **Regarding additional potential demo sites (referred in Attachment G) - can you please clarify the requirement that they be "within an electric or natural gas utility?" Does this mean the site must be at (a) an actual utility facility or (b) at a particular utility's customer facility? If the former, does an outsourced service facility qualify?**

The language you referred to in the Attachment G: Criteria #6 needs an amendment. Hopefully this change will bring clarity and will respond to your query. The amendment is shown in bold italics font. The amended paragraph should read as follows:

6. Demonstrate Site Appropriate for Emerging Technology and Applicable Emerging Technology Market.
- a. The project has a committed industrial demonstration site and provides a name and contact information to verify the availability of the industrial site for the demonstration or performance validation. The proposal has also identified additional potential industrial demonstration sites within an electric or natural gas utility's ***service territory*** in California. The industrial site where the technology is to be demonstrated is consistent with the potential/intended market(s) or application for the proposed technology.

35. **Who is on the Technical Screening committee? Who sits on the RD&D Policy Committee? Are experts already under contract, and if not what is the process by which technical reviewers are selected to review specific proposals?**

The proposal scoring committee generally consists of Energy Commission staff, but may be augmented by subject matter experts when needed expertise is unavailable within the Commission. At that time, the Energy Commission may invite subject matter experts from any source (such as a national laboratory, a consulting company, a university, a research organization or U.S. Department of Energy, etc.) to get the requisite expertise. Given the likely diversity of technologies we may encounter in the response to our current solicitation, we anticipate using outside expertise. The Commission ensures that those providing the technical input or scoring the proposals do not have a conflict of interest or any vested interest in providing their informed opinion.

The names of the Energy Commission's RD&D Policy Committee are on the Energy Commission's website under "Commissioners". The reason we cannot give any specific names right now is that we have had some recent appointments to the Energy Commission, and the RD&D Committee membership is likely to be reconfigured. Please check the Energy Commission website for the updates on the RD&D Committee appointments.

- 36. Disposition of equipment purchased with PIER funding - please clarify? What is meant by "disposition?" Is the actual technology hardware that is the subject of the grant funding included in the definition of "equipment?" Or is this meant to cover accessory equipment - e.g. meters; gauges, printers, etc?**

Grant Recipients are encouraged to utilize match share funding when purchasing equipment to the greatest extent possible. In instances where PIER funds are utilized to purchase equipment under the award, the Energy Commission will determine proper disposition of the equipment depending upon the unique circumstances of the project. Typically, if the equipment continues to be utilized consistent with the intent of the grant award, the Recipient is allowed to continue to operate the equipment in question.

Equipment is defined in the Terms and Conditions, Section 23.

- 37. If match fund partners and demonstration participants have background intellectual property relating to the proposed project, how will their background IP be protected under agreements for this solicitation?**

The Energy Commission takes no rights in pre-existing intellectual property (IP) developed prior to the grant award. Prior to executing the funding award, grant Recipients will be allowed to identify and document all relevant pre-existing IP. Please refer to the Terms and Conditions Sections 24 and 25.

- 38. Are public universities and colleges (e.g., University of California) eligible for CBE preferences points?**

Yes, as long as the Applicant meets all of the requirements contained in Attachment I and completes and submits the questionnaire in Attachment J as part of the submitted proposal.

- 39. Are National Laboratories which are managed by the University of California for the Department of Energy, which have a tax exempt status as a Nonprofit, Institution of Higher Education entity (IRS Determination: 501(c)(3), eligible for CBE preferences points?**

See answer to question #38 above.